## THE HOMERIA SPECIES OF THUNBERG'S HERBARIUM1

### PETER GOLDBLATT<sup>2</sup>

#### ABSTRACT

Thunberg's South African collections contain the type material for four species which conform to current concepts of *Homeria*. A detailed examination of the type material in the Thunberg Herbarium has resulted in selection of lectotypes for three of these species, where more than one sheet of a species was present. *Homeria collina* (Thunb.) Vent and *H. umbellata* (Thunb.) Lewis remain as presently interpreted. However, the name *Moraea polyanthos* L.f., as currently understood is misapplied and is an earlier name for *H. lilacina* L. Bol. The species at present called *M. polyanthos* now becomes *M. bipartita* L. Bol. The type of the fourth species, *M. crispa*, is incomplete, but it is very likely that it is simply a crisped-leafed form of the widespread Karoo species *H. rogersii* L. Bol. for which it is an earlier synonym. No new combinations in *Homeria* are made here. The genus is currently under investigation, and the definition of *Homeria* and the related *Moraea* is being revised.

Homeria is a genus of some 30 species of Iridaceae-Irideae, endemic in southern Africa. Species are concentrated in the Cape Region of South Africa, and, where they occur, are generally very common plants. Strangely, Thunberg's collection from the Cape, now housed in the herbarium of the Institute for Systematic Botany, University of Uppsala, Sweden, has few specimens of the genus, and from these only four species were described. This is most likely because Thunberg thought there were only a few species where today we recognize many, and so he collected no more specimens once he felt he had gathered the basic types.

Thunberg, and as well the younger Linnaeus, who worked on Thunberg's collections, considered *Homeria* indistinguishable from genera such as *Aristea*, *Ferraria*, *Tigridia*, and *Bobartia*, and they placed species of all these genera in *Moraea*. True species of *Moraea* they regarded as *Iris*, and Thunberg collected a large number of species of true *Moraea*, a very variable genus at the Cape.

Of the many species of "Moraea" which Linnaeus fil. and Thunberg described, the following four are Homeria-like. The first is M. polyanthos L.f. (1781); followed by M. collina, M. umbellata and M. crispa, all described by Thunberg (1787).

In modern times, N. E. Brown (1928) examined Thunberg's Iridaceae, including the few *Homeria* species. I have recently examined the specimens in question, not always agreeing with Brown's conclusions. The sheets are listed below by species with the numbers assigned to them on the microfiche of Thunberg's herbarium.

# 1. Moraea collina Thunb.

1209 Specimen has a large pale flower; anthers 7 mm long, slightly diverging; tepals ca. 40 mm long, 15 mm wide; ovary 12 mm long. A good match for the common Cape Peninsula species now known as *H. collina* (Thunb.) Salisb. This specimen is the lectotype.

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<sup>2</sup> B. A. Krukoff Curator of African Botany, Missouri Botanical Garden, Post Office Box 299, St. Louis, Missouri 63166.

- 1210 Probably also H. collina but less well preserved, possibly a related species.
- 1211 This is a very tall, single-leafed plant, the leaf sheathing the lower part of the stem, which is much branched: probably what is currently called *H. pillansii* L. Bol. (It is not *Moraea gigantea* as suggested by Brown, this being a synonym of *H. miniata*.)
- 1212 Specimen has three leaves, is short in stature and is in fruit: probably *H. miniata* (Andr.) Sweet.

### 2. M. umbellata Thunb.

- 1230 This is the Cape plant currently called *H. umbellata* (Thunb.) Lewis, matching, as Brown comments, *Zeyher 4087*. The lectotype.
- 1231 Superficially like the previous, but the fruits have the characteristic beak indicating the specimen is *Moraea fugax* (de la Roche) Jacq. [= M. edulis (L.f.) Ker] (in spite of Brown's comment to the contrary).

## 3. M. polyanthos L.f.

- 1226 "α" A single poor specimen but clearly with the filaments entirely united; yellow anthers more than 5 mm long; style branches narrow and no style crests. It is the plant currently called Homeria lilacina L. Bol. (1920) and M. polyanthos is, of course, an earlier and valid name. This is chosen as the lectotype, as it has better preserved flowers of the two sheets bearing the name M. polyanthos.
- 1227 "β" Three specimens, of much branched plants with several leaves, the flowers poorly preserved; filaments are apparently united entirely, the anthers yellow, ca. 5 mm long; capsules 8 mm long. It is the same species as 1226, but with flowers in a poorer state of preservation.

The above determination of *Moraea polyanthos* was made after long, careful study, and I have noted above some important features of the specimens. Pertinent characters in making the determination are nature of the filaments, length of anthers, and style branch structure, specifically the presence or absence of prominent crests. The *Moraea* species "*M. polyanthos* sensu auct." has filaments free in the upper third, anthers ca. 5 mm long, and prominent style crests. *Moraea polyanthos* Thunb. (the type) and *Homeria lilacina* have united filaments, anthers 6 mm long, and narrow style branches without crests.

I am contradicting Brown's identification since the species lacking style crests is not a *Moraea* as currently understood, and its synonym *Homeria lilacina* had been known since 1920 (L. Bolus, 1920). Regrettably I am also contradicting myself (Goldblatt, 1976b) for earlier I had seen the Thunberg specimens and been satisfied with the identification of Thunberg's species with a common Cape *Moraea*. At that time I was unaware of the possibility of a good match with *H. lilacina*, which I know now to be identical to *M. polyanthos* sensu auct., non Thunb., in all except minute floral features.

The consequences of this change in interpretation of *Moraea polyanthos* are first, that the true *Moraea* species presently known as *M. polyanthos* must be called *M. bipartita* L. Bolus, the only available name for the plant. Second, the species currently *Homeria lilacina* L. Bol. becomes *Moraea polyanthos*, *H. lilacina* falling into synonymy here. I do not wish to transfer *M. polyanthos* to *Homeria*, since I am currently redefining this genus and plan to exclude *M. polyanthos* Thunb. (*H. lilacina*) from *Homeria*.

Thus Moraea polyanthos in my revisions of Moraea (Goldblatt, 1976a, 1976b) for both summer and winter rainfall areas of South Africa, becomes M. bipartita. Inclusion of M. polyanthos Thunb. (H. lilacina) in Moraea is the subject of a detailed paper (Goldblatt, 1980) on reevaluation of the generic limits of Homeria.

## 4. Moraea crispa Thunb.

1214 The collection consists of two plants which lack complete flowers today; plants each have a branched stem, and solitary, basal, channeled and twisted leaf. Leaves of both specimens are crisped along the margins. The species is most like the plant currently known as *Homeria rogersii* L. Bol. except that no collection of *H. rogersii*, a widespread Karoo species, has crisped leaves.

We should accept that as Thunberg placed Moraea crispa in Moraea, it lacked style crests, a feature he and Linnaeus fil. considered characteristic of Iris, and thus M. crispa conforms with present concepts of Homeria. Moraea crispa had a blue flower, and this strengthens the belief that it and H. rogersii are the same species. There thus seems very little doubt that M. crispa and H. rogersii are the same plant, and I therefore propose reducing H. rogersii to synonymy in M. crispa. I feel confident that further collecting will result in the discovery of a crisped-leafed form otherwise conforming to H. rogersii, which would then compel the name change made here. As I am currently redefining Homeria and Moraea (Goldblatt, 1980) I do not wish to propose a new combination here. Moraea crispa is probably most closely related to M. polyanthos, and may remain in Moraea.

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